

Medical records in the palm of your hand

Detrick-based system helps transfer data

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FREDERICK — When troops returned from the first Gulf War in the 1990s, many experienced a variety of symptoms, referred to as "Gulf War syndrome," but medical information and records weren't well-documented during their deployment.

Medical Communications for Combat Casualty Care, a program of the Department of Defense referred to as MC4 and based at Fort Detrick since 1999, has developed and distributed a comprehensive system to help the military eliminate this lack of medical documentation.

The MC4 tactical system allows medical units overseas to record patient information while on the battlefield, then share those records with battalion aid stations and combat hospitals.

Medical units can document service members' conditions and previous treatments, reducing, for example, the risk of overmedicating an injured patient.

This technology may soon break into the civilian sector. Maj. Kevin Watts, MC4 assistant program manager, said MC4 is meeting Thursday with representatives from the Federal Emergency Management Agency.

FEMA has inquired about using the system as it prepares for this year's hurricane season. The MC4 equipment can operate with no or low Internet connectivity — medical teams can store information and download it later, Maj. Watts said.

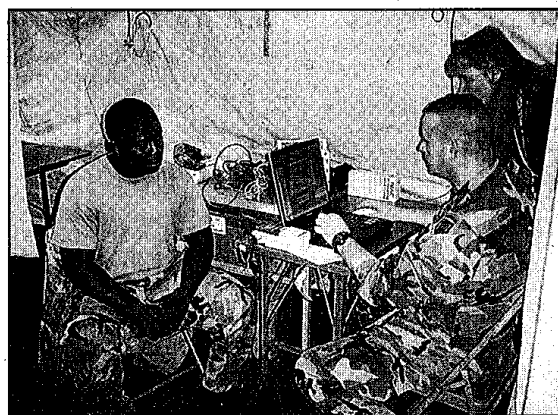
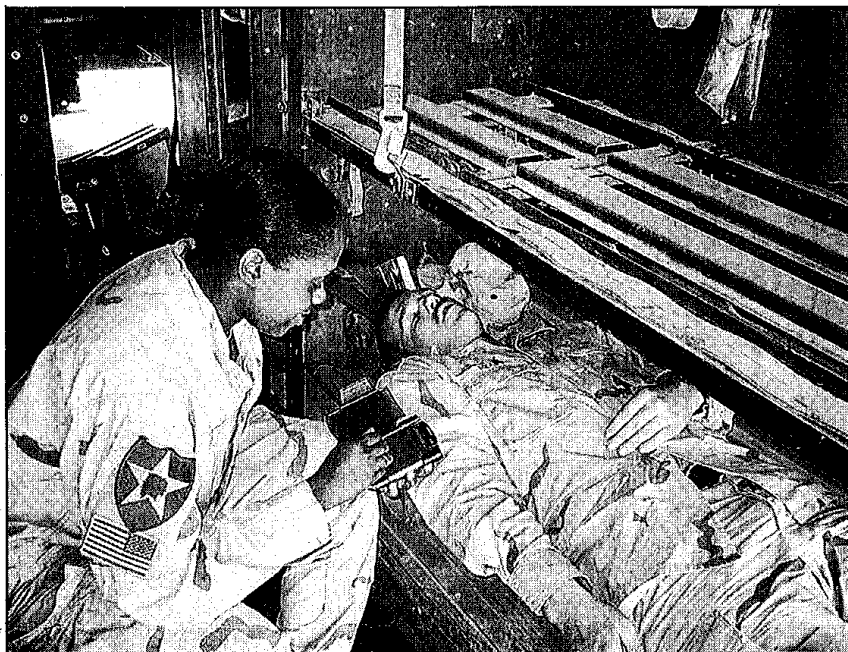
The system includes a handheld, wireless device, the Battlefield Medical Information System Tactical-Joint, developed by Fort Detrick's Telemedicine and Advanced Technology Research Center.

Medical first responders can enter data on the BMIST-J, transfer the information to MC4 laptop software and upload that information to a database for clinicians.

Documenting service members' care on paper isn't ideal for military medics, as paperwork is hard to transfer and easy to lose, MC4 spokesman Ray Steen said. The electronic MC4 system creates a record of all the care a patient has received, he said.

Medics can track their patients, research treatment options and use logistics software to automatically restock supplies.

MC4 has deployed more than



Courtesy photo

A key part of MC4's mission is equipping front line medics with the tools they need to treat casualties in the battlefield. MC4 technology records and shares near real-time medical information with the touch of a stylus. This photo shows members of the 3-2 Stryker Brigade Combat Team, 296th Brigade Support Battalion, C Company, Mosul, Iraq.

tems are available to all military branches.

In January, MC4 also linked a U.S. embassy clinic in Baghdad, Iraq, to a remote location. The clinic used MC4 laptop software to communicate patient information to the 10th CSH, a half-mile away.

The connection allows the embassy clinic's medical staff to retrieve test results, monitor patients' conditions and order laboratory, radiology and pharmacy services.

In late February, the Healthcare Information and Management Systems Society named the MC4 Product Management Office the 2005 Mercury Information Management/Information Technology team of the year.

The Mercury award recognizes a team in the Army Medical Department that demonstrates achievement in IM/IT.

The society also presented MC4 the 2005 Military Health System, Army Medical Information Systems/Information Management team of the year award.

A medical professional uses the MC-4 system to administer a sick call visit at the 14th Combat Support Hospital during Joint Task Force Katrina relief efforts in New Orleans.

Courtesy photo

11,000 systems to date, including 6,500 in 2005, and the technology had been used to transfer more than 270,000 medical records from overseas battlefields to the United States.

More than 250 military units are using the software in Iraq, Kuwait and Qatar. MC4 deployed 500 systems to Afghanistan in early March, to the 14th Combat Support Hospital and other units.

The 14th CSH, deployed to Afghanistan for one year in early February, previously used the MC4 system in New Orleans while treating military personnel aiding Hurricane Katrina victims.

Maj. Watts said deployment in

Afghanistan is ahead of schedule. Six logistics support personnel are assisting with the transfer.

In addition to sending support staff to help train on-site medical personnel, MC4 provides 24-hour support through a telephone and Internet help desk, as well as MC4 regional support centers.

These centers are at Fort Lewis, Wash.; Fort Bragg, N.C.; Food Hood, Texas; and in Iraq, Kuwait, Germany and Korea.

In May, the 86th CSH in Iraq became the first deployed hospital in U.S. military history to electronically capture military personnel health treatments using a joint medical software system. Joint sys-